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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,528	12/30/2003	Xing Su	INTEL1210/US (P18026)	8863

28213 7590 11/17/2005

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SAN DIEGO, CA 92121-2133

EXAMINER
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YU, MELANIE J

ART UNIT	PAPER NUMBER
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1641

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/749,528

Applicant(s)

SU ET AL.

Examiner

Melanie Yu

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**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 17 October 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

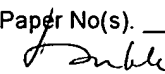
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☒ Applicant's reply has overcome the following rejection(s): See Continuation Sheet.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 2-33 and 38.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_  
13. ☐ Other: \_\_\_\_\_.

  
**LONG V. LE**  
**SUPERVISORY PATENT EXAMINER**  
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11/14/05

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Continuation of 11. does NOT place the application in condition for allowance because: for the reasons stated in examiner's previous office action dated 15 August 2005.

Regarding the rejection of claims 2-5, 10, 14-17, 20-26, 29-33 and 38, under 35 USC 103(a) over Natan et al. in view of Carron, and claims 6-9, 11-13, 18-19 and 27-28 as being dependent from a claim rejected over Natan et al. in view of Carron, applicant argues that as stated in the previous office action dated 15 August 2005, Natan et al. fail to teach chromatographically separating proteins and protein fragments in the sample into a plurality of fractions. Applicant argues that Natan is limited to physical separation of a sample into smaller portions or allotments by distributing or allotting portions of a sample into individual microwells, and the proteins are not distinguished from each other prior to separation. However, the protein ligands immobilized to the surface of Natan et al. are capable of binding to target proteins and must be separated from a sample and distinguished from each other prior to immobilization in order to determine which ligand is bound at each specific locations. Furthermore, the ligands specific for different target analyte at specific locations must be separated before immobilization to the substrate (col. 3, lines 23-27; col. 10, lines 38-57).

Applicant further argues that Carron fails to teach chromatographically separating compounds in a sample into a plurality of fractions and also fails to teach each fraction containing an individual compound. However, the chromatographic technique of Carron separates components to be analyzed into aliquots to allow for powerful chemical analysis methods to be applied to each component. Therefore, each aliquot of Carron has an individual component and each component is separated from one another. Although Carron does not specifically teach a plurality of fractions, a plurality of aliquots, each containing a component is

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formed by the chromatographic separation technique of Carron, and the aliquot is therefore a fraction containing an individual component. Therefore, chromatographic separation of protein ligands of Natan et al. forms fractions containing individual protein ligands to be deposited at individual locations.

Applicant argues that Carron discloses "a generalized molecule-specific means of detection that can be applied to all existing separation systems" and that the "invention consists of the modification of SERS substrates by the application of a stabilized coating that also reproduces or mimics the separation specific process being utilized, and the Carron device is a SERS separation cell having an input channel for inflow from an external separation device. However, as evidenced at column 5, lines 27-44, the chemical separation system is upstream from the SERS separation cell, and the chemical separation system is the external separation device. The SERS separation cell of Carron is not relied upon for chromatographic separation. At column 3, lines 54-66, Carron teaches that the external separation device may be a chromatographic separation and is separate from the SERS separation cell.

Applicant also argues that the device of Carron uses gas that has been separated prior to introduction into the device for analysis. However, as taught at column 5, lines 27-30, Carron teaches the chemical separation system (chromatographic technique) can be used for separation molecules in liquids. Therefore, the separation system of Carron can be used to chromatographically separate the proteins of Natan et al. prior to immobilization on a substrate in order to ensure the protein ligands are adequately separated at each specific location.

Continuation of 5. Applicant's reply has overcome the following rejection(s): rejections of claims 2-33 and 38 under 35 USC 112, second paragraph.